Amendments of the Claims:

A detailed listing of all claims in the application is presented below. This listing of claims will replace all prior versions, and listings, of claims in the application. All claims being currently amended are submitted with markings to indicate the changes that have been made relative to immediate prior version of the claims. The changes in any amended claim are being shown by strikethrough (for deleted matter) or underlined (for added matter).

1. (Currently amended) A method of detecting intrusion in an area by analysis of a plurality of time-sequential image frames from at least one image sensor, comprising the steps of:

a) taking a current image frame;

b) dividing the current image frame into a plurality of cell images, each cell image being a portion of the current image comprising a plurality of adjacent pixels;

c) blurring the cell image;

d) storing a value representing the blurred cell image in a stack of a plurality of time-sequential cell values, incrementing the stack such that an oldest cell value is lost when the value is added to the stack;

e) computing a sliding average of the plurality of cell values in the stack;

f) computing a difference between the cell value from the current image and the sliding average;

g) reporting a detection if the difference exceeds a defined lower threshold or a defined upper threshold;

g1) starting a count when a detection is first reported in step (g);

g2) incrementing the count each time another image is processed and the detection remains reported;

g3) confirming the detection and setting a cell active condition when the count exceeds a count threshold; and

h) repeating the method from step (a);

wherein steps (g1), (g2), and (g3) are sequential after step (g).

2. (Original) The method of claim 1 in which the images are taken using infrared.

3. (Original) The method of claim 1 in which the images are taken using visual light.

4. (Currently amended) The method of claim 1 in which the blurring step comprises averaging an intensity amplitude of the pixels in the ~~sub-image~~ cell image.

5. (Cancelled)

6. (Currently amended) The method of claim ~~5~~ 1, further comprising the step of resetting the cell active condition and stopping the count when an opposite threshold is reached from the threshold which caused the detection to be reported.

7. (Original) The method of claim 6 further comprising the step of estimating the time an intruder remains in a cell from the count.

8. (Currently amended) The method of claim ~~5~~ 1, further comprising the step, if a detection is reported in step (g), but after a selected time the count threshold is not exceeded, of searching adjacent cells to determine if a detection has occurred, and confirming a detection if a detection has occurred in an adjacent cell.

9. (Original) The method of claim 8, further comprising the steps of deriving an angular speed and direction estimate from the relative direction of the adjacent cell, and predicting the next likely detection cell.

10. (Original) The method of claim 1, further comprising the step of reporting the detection to a central computer.

11. (Original) The method of claim 10, further comprising the step of the central computer raising an intrusion alarm based on selected rules and the reported detections from a plurality of image sensors.

12. (Original) The method of claim 11, in which the central computer confirms a detection by detections from other image sensors having overlapping coverage.

13. (Original) The method of claim 12, further comprising the step of deriving an intruder position from image data from at least two sensors having overlapping coverage.

14. (Original) The method of claim 10, further comprising the step of the central computer displaying a map of the plurality of sensors, and when a detection occurs, putting an indication on the map.

15. (Original) The method of claim 14, in which the indication is a strobe line indicating a bearing of detection from the sensor at which the detection occurred.

16. (Original) The method of claim 1, in which selected cells are masked off and not processed, such that reporting of detections due to known causes is inhibited.

17. (Original) The method of claim 1, further comprising the step of storing a plurality of images for historical comparisons.

18. (Original) The method of claim 17, further comprising the step of displaying a the plurality of images in time sequence upon detection of an intrusion, such that intruder movement is shown.

19. (Original) The method of claim 1, further comprising the step of storing a record of detections.